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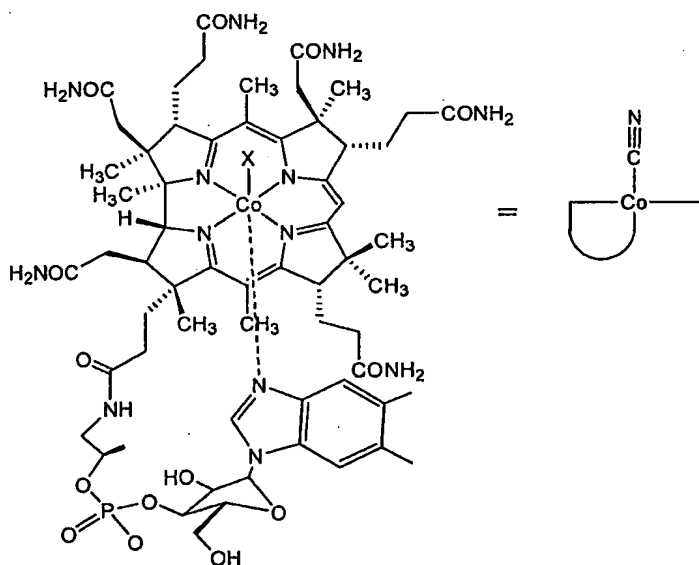
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(54) Title: METAL COMPLEXES HAVING VITAMIN B₁₂ AS A LIGAND



(57) Abstract: The present invention relates to a metal complex of the general formula $M(L)_n$, wherein each L is independently selected and represents a ligand and at least one L is vitamin B₁₂(cyanocobalamin) or a derivative thereof bound through the nitrogen atom of its cyanide group to M, which is an element selected from the transition metals, thus, forming a M-NC-[Co] moiety with [Co] representing vitamin B₁₂ without cyanide and wherein n is 1, 2, 3, 4, 5 or 6. The complex can be prepared by mixing a precursor molecule with vitamin B₁₂. The metal complexes can be used for radiodiagnostics, chemotherapy and radionuclide therapy.